

1. A flexible, disposable cup comprising a side wall, an open outlet end, and a closed bottom defining an interior, the outlet end defining an axis, and a flange extending outward and downward from an edge of the outlet end of the disposable cup at an angle. ✓

5 2. The disposable cup of claim 1 wherein the angle of the flange is in a range of from about 10° to about 70° from the axis of the outlet end.

3. The disposable cup of claim 1 wherein the disposable cup is made of a substantially transparent polymeric material.

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4. The disposable cup of claim 1 wherein the disposable cup has indicia for measuring fluids on the side wall.

15 5. The disposable cup of claim 1 wherein the flange of the disposable cup further comprises a removal tab.

6. The disposable cup of claim 1 wherein the side wall is generally cylindrical.

20 7. The disposable cup of claim 1 wherein a distance across the outlet end is greater than a distance across the bottom in at least one direction.

8. The disposable cup of claim 7 wherein the side wall has a generally cylindrical lower side wall portion and generally frustoconical upper side wall portion.

25 9. The disposable cup of claim 7 wherein the side wall has a generally cylindrical lower side wall portion, a generally frustoconical intermediate side wall portion, and a generally cylindrical upper side wall portion.

30 10. The disposable cup of claim 7 wherein the side wall is generally cylindrical and an upper end of the side wall is connected to the flange by a flat annular portion.

11. The disposable cup of claim 7 wherein the side wall has a generally elliptical lower side wall portion, a generally cylindrical upper side wall portion, and an intermediate side wall portion extending from the lower side wall portion to the upper side wall portion.
- 5 12. The disposable cup of claim 7 wherein the side wall has a generally cylindrical lower side wall portion, a generally cylindrical upper side wall portion, and an intermediate side wall portion extending from the lower side wall portion to the upper side wall portion.
- 10 13. A disposable lid comprising an inner portion and an outer portion, the outer portion being generally frustoconical and defining an edge, the edge defining an axis, the edge of the disposable lid having a frustoconical angle, the angle of the edge on the disposable lid being substantially the same as an angle of a flange on a disposable cup, the disposable lid being adapted to fit over the disposable cup, the edge of the disposable lid mating with the
15 flange of the disposable cup, the disposable lid having a fitting integrally connected to the inner portion, the fitting having an opening therethrough.
14. The disposable lid of claim 13 wherein the angle of the edge is in a range of from about 10° to about 70° from the axis of the edge
- 20 15. The disposable lid of claim 13 wherein the disposable lid is made of a substantially transparent polymeric material, a translucent polymeric material, or an opaque polymeric material.
- 25 16. The disposable lid of claim 13 wherein the disposable lid has a downward extending rib adapted to mate with an inside of the side wall of the disposable cup and form a seal.
17. The disposable lid of claim 13 wherein the edge of the disposable lid has a
30 downwardly projecting sealing bead adapted to contact the flange of the disposable cup.
18. The disposable lid of claim 13 further comprising a plug to close the fitting of the disposable lid.

19. The disposable lid of claim 18 wherein the plug fits inside the fitting of the disposable lid.

20. The disposable lid of claim 18 wherein the plug fits outside the fitting of the
5 disposable lid.

21. The disposable lid of claim 13 wherein the edge of the disposable lid further comprises a removal tab.

10 22. The disposable lid of claim 13 wherein the inner portion of the disposable lid is generally frustoconical.

23. The disposable lid of claim 13 wherein the inner portion of the disposable lid has a generally frustoconical part extending outward from the fitting and an upwardly extending
15 projection at an outer end of the generally frustoconical part, the upwardly extending projection being connected to the outer portion of the disposable lid.

24. A fluid supply assembly comprising:

a flexible, disposable cup having a side wall, an open outlet end, and a closed
20 bottom defining an interior, the outlet end defining an axis, and a flange extending outward and downward from an edge of the outlet end of the disposable cup at an angle;

a reusable cup holder having a side wall, an open upper end, and a lower end, the lower end having an opening therein, the upper end defining an axis, a flange extending outward and downward from an edge of the upper end of the reusable cup holder at an
25 angle, the angle of the flange of the reusable cup holder being substantially the same as the angle of the flange of the disposable cup whereby the flange of the reusable cup holder supports the flange of the disposable cup, a connecting surface at the upper end, the reusable cup holder being adapted to receive the disposable cup;

a disposable lid having an inner portion and an outer portion, the outer portion
30 having an edge having a frustoconical angle, the angle of the edge of the disposable lid being substantially the same as the angle of the flange of the disposable cup, the disposable lid being adapted to fit over the disposable cup, the edge of the disposable lid

mating with the flange of the disposable cup, the disposable lid having a fitting integrally connected to the inner portion, the fitting having an opening therethrough; and

a reusable outer lid having an inner portion and an outer portion, the outer portion having an edge having a frustoconical angle, the angle of the edge of the reusable outer lid being substantially the same as the angle of the flange of the reusable cup holder, the reusable outer lid being adapted to fit over the reusable cup holder, the edge of the reusable outer lid mating with the flange of the reusable cup holder, the reusable outer lid having a fitting integrally connected to the inner portion, the fitting of the reusable outer lid having an opening therethrough, the fitting of the disposable lid adapted to fit into the fitting of the reusable outer lid, a complementary connecting surface at the edge of the reusable outer lid, the complementary connecting surface of the reusable outer lid adapted to mate with the connecting surface of the reusable cup holder to seal the reusable cup holder and reusable outer lid together.

25. The fluid supply assembly of claim 24 wherein the angle of the flange of the disposable cup is in a range of from about 10° to about 70° from the axis of the outlet end.

26. The fluid supply assembly of claim 24 wherein the angle of the flange of the reusable cup holder is in a range of from about 10° to about 70° from the axis of the upper end.

27. The fluid supply assembly of claim 24 wherein the angle of the edge of the disposable lid is in a range of from about 10° to about 70° from an axis defined by the edge.

28. The fluid supply assembly of claim 24 wherein the angle of the edge of the reusable outer lid is in a range of from about 10° to about 70° from an axis defined by the edge.

29. The fluid supply assembly of claim 24 further comprising a conduit having an opening therethrough, the conduit adapted to mate with the fitting of the reusable outer lid and the fitting of the disposable lid to provide a fluid connection from the interior of the disposable cup through the conduit.

30. The fluid supply assembly of claim 24 wherein the reusable cup holder is made of a substantially transparent polymeric material.

31. The fluid supply assembly of claim 24 wherein the disposable cup is made of a substantially transparent polymeric material.

32. The fluid supply assembly of claim 24 wherein the reusable outer lid is made of a polymeric material.

33. The fluid supply assembly of claim 24 wherein the disposable lid is made of a substantially transparent polymeric material.

34. The fluid supply assembly of claim 24 wherein the disposable cup has indicia for measuring fluids on the side wall.

35. The fluid supply assembly of claim 24 wherein the reusable cup has indicia for measuring fluids on the side wall.

36. The fluid supply assembly of claim 24 wherein the disposable lid has a downward extending rib adapted to mate with an inside of the side wall of the disposable cup and form a seal.

37. The fluid supply assembly of claim 24 wherein the inner portion of the reusable outer lid is generally frustoconical.

38. The fluid supply assembly of claim 37 wherein an angle of the inner portion is substantially the same as the angle of the edge of the reusable outer lid

39. The fluid supply assembly of claim 38 wherein the inner portion of the reusable outer lid is flat.

40. The fluid supply assembly of claim 24 wherein the inner portion of the reusable outer lid has an upwardly extending projection.

41. The fluid supply assembly of claim 40 wherein the lower end of the reusable cup holder has a downwardly extending projection, the downwardly extending projection adapted to fit inside the upwardly extending projection of the reusable outer lid of an adjacent reusable outer lid to allow secure stacking of the fluid supply assemblies.

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42. The fluid supply assembly of claim 24 wherein the edge of the disposable lid has a downwardly projecting sealing bead adapted to contact the flange of the disposable cup.

43. The fluid supply assembly of claim 24 wherein the connecting surface of the reusable cup and the complementary connecting surface of the reusable lid are selected from complementary threads, lugs and grooves, or pins and slots.

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44. The fluid supply assembly of claim 24 wherein the reusable outer lid has at least one opening in the inner portion or the outer portion.

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45. The fluid supply assembly of claim 24 further comprising a plug to close the fitting of the disposable lid.

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46. The fluid supply assembly of claim 45 wherein the plug fits inside the fitting of the disposable lid.

47. The fluid supply assembly of claim 45 wherein the plug fits outside the fitting of the disposable lid.

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48. The fluid supply assembly of claim 24 wherein the disposable cup further comprises a removal tab on the flange.

49. The fluid supply assembly of claim 24 wherein the disposable lid further comprises a removal tab on the edge.

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50. The fluid supply assembly of claim 24 wherein the side wall of the disposable cup is generally cylindrical.

51. The fluid supply assembly of claim 24 wherein a distance across the outlet end of the disposable cup is greater than a distance across the bottom in at least one direction.

52. The fluid supply assembly of claim 51 wherein the side wall of the disposable cup
5 has a generally cylindrical lower side wall portion and a generally frustoconical upper side wall portion.

53. The fluid supply assembly of claim 51 wherein the side wall of the disposable cup
has a generally cylindrical lower side wall portion, a generally frustoconical intermediate
10 side wall portion, and a generally cylindrical upper side wall portion.

54. The fluid supply assembly of claim 51 wherein the side wall of the disposable cup
is generally cylindrical and an upper end of the sidewall is connected to the flange by a flat
annular portion.
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55. The fluid supply assembly of claim 51 wherein the side wall of the disposable cup
has a generally elliptical lower side wall portion, a generally cylindrical upper side wall
portion, and an intermediate side wall portion extending from the lower side wall portion
to the upper side wall portion.
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56. The fluid supply assembly of claim 51 wherein the side wall of the disposable cup
has a generally cylindrical lower side wall portion, a generally cylindrical upper side wall
portion, and an intermediate side wall portion extending from the lower side wall portion
to the upper side wall portion.
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57. The fluid supply assembly of claim 24 wherein the inner portion of the disposable
lid is generally frustoconical.

58. The fluid supply assembly of claim 24 wherein the inner portion of the disposable
30 lid has a generally frustoconical part extending outward from the fitting and an upwardly
extending projection at an outer end of the generally frustoconical part, the upwardly
extending projection being connected to the outer portion of the disposable lid.

59. The fluid supply assembly of claim 24 further comprising a clear sheet having indicia for measuring fluids thereon, the clear sheet having a slot on a first side and a corresponding tab on an opposite side, the tab being adapted to fit into the slot so that the sheet forms a cylinder.

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60. The fluid supply assembly of claim 59 wherein the indicia for measuring fluids comprises at least two universal scales.

61. The fluid supply assembly of claim wherein a diameter of the downwardly extending projection of the reusable cup holder is less than a diameter of the lower end, and further comprising a second downwardly extending projection having a diameter substantially the same as the diameter of the lower end.

62. A method of preparing a fluid supply assembly for use with a fluid supply applicator comprising:

providing a fluid supply assembly comprising:

a flexible, disposable cup having a side wall, an open outlet end, and a closed bottom defining an interior, the outlet end defining an axis, and a flange extending outward and downward from an edge of the outlet end of the disposable cup at an angle;

a reusable cup holder having a side wall, an open upper end, and a lower end, the lower end having an opening therein, the upper end defining an axis, a flange extending outward and downward from an edge of the upper end of the reusable cup holder at an angle, the angle of the flange of the reusable cup holder being substantially the same as the angle of the flange of the disposable cup whereby the flange of the reusable cup holder supports the flange of the disposable cup, a connecting surface at the upper end, the reusable cup holder being adapted to receive the disposable cup;

a disposable lid having an inner portion and an outer portion, the outer portion having an edge having a frustoconical angle, the angle of the edge of the disposable lid being substantially the same as the angle of the flange of the disposable cup, the disposable lid being adapted to fit over the disposable cup, the edge of the disposable lid mating with the flange of the

disposable cup, the disposable lid having a fitting integrally connected to the inner portion, the fitting having an opening therethrough; and a reusable outer lid having an inner portion and a outer portion, the outer portion having an edge having a frustoconical angle, the angle of the edge of the reusable outer lid being substantially the same as the angle of the flange of the reusable cup holder, the reusable outer lid being adapted to fit over the reusable cup holder, the edge of the reusable outer lid mating with the flange of the reusable cup holder, the reusable outer lid having a fitting integrally connected to the inner portion, the fitting of the reusable outer lid having an opening therethrough, the fitting of the disposable lid adapted to fit into the fitting of the reusable outer lid, a complementary connecting surface at the edge of the reusable outer lid, the complementary connecting surface of the reusable outer lid adapted to mate with the connecting surface of the reusable cup holder to seal the reusable cup holder and reusable outer lid together;

placing the disposable cup in the reusable cup holder;
filling the disposable cup with fluid;
placing the disposable lid on the disposable cup; and
placing the reusable outer lid on the reusable cup holder.

63. The method of claim 62 further comprising attaching the fluid supply assembly to the fluid applicator.

64. The method of claim 62 further comprising attaching a conduit to the fitting of the reusable outer lid.

65. The method of claim 62 further comprising:
providing a clear sheet having measuring indicia thereon, the clear sheet having a slot on a first side and a corresponding tab on an opposite side;

inserting the tab of the clear sheet into the slot so that the sheet forms a cylinder;
placing the disposable cup in the cylinder formed by the clear sheet;
measuring the fluid using the indicia on the clear sheet; and
removing the disposable cup from the cylinder formed by the clear sheet.

66. The method of claim 65 wherein the disposable cup is filled with fluid before the disposable cup is placed in the reusable cup holder.